

## WHAT IS CLAIMED IS:

1. A polymeric formulation comprising from about 40 wt% to about 80 wt% of a low melting polymer or copolymer, from about 5 wt% to about 50 wt% of a solid fatty acid,  
5 and one or more active agents.
2. A polymeric formulation according to claim 1 which comprises from about 40 wt% to about 80 wt% of low melting polymer or copolymer originally in the form of granules, small irregularly shaped particles or powder, and from zero to about 15 wt% of low  
10 melting polymer or copolymer originally in the form of conventional pellets, with the proviso that the total amount of low melting polymer or copolymer in the formulation is no greater than about 80 wt%.
3. A polymeric formulation according to claim 1 wherein the low melting polymer or  
15 copolymer is ethylene-vinyl acetate copolymer.
4. A polymeric formulation according to claim 2 wherein the low melting polymer or copolymer is ethylene-vinyl acetate copolymer.
- 20 5. A polymeric formulation according to claim 1 wherein the solid fatty acid is stearic acid.
6. A polymeric formulation according to claim 3 wherein the solid fatty acid is stearic acid.  
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7. A polymeric formulation according to claim 1 wherein the active agent is selected from those that are useful in the control of insect or acarid pests.
8. A polymeric formulation according to claim 1 wherein the active agent is selected  
30 from the group consisting of insecticides, bactericides, fungicides, acaricides, attractants, repellents, and biologically active ingredients.

9. A polymeric formulation according to claim 1 which further comprises an active agent synergist.

10. A method for synthesizing a polymeric pest control system, the method comprising:

mixing together at least one active agent and a solid fatty acid, the solid fatty acid being in an amount of from about 5 wt% to about 50 wt% of the final formulation;

heating the active agent/fatty acid mixture to a liquid state;

adding the active agent/fatty acid mixture to a low melting polymer or copolymer to make a dry blend, the polymer or copolymer being in an amount of from about 40 wt% to about 80 wt% of the final formulation; and

processing or forming the dry blend into the shape of the pest control system.

11. A method according to claim 10 wherein the polymer or copolymer is in an amount of from about 40 wt% to about 80 wt% in the form of granules, small irregularly shaped particles or powder, and from zero to about 15 wt% of low melting polymer or copolymer in the form of conventional pellets, with the proviso that the total amount of low melting polymer or copolymer in the formulation is no greater than about 80 wt%.

12. A method according to claim 10 wherein the low melting polymer or copolymer is ethylene-vinyl acetate copolymer.

13. A method according to claim 10 wherein the solid fatty acid is stearic acid.

14. A method according to claim 12 wherein the solid fatty acid is stearic acid.

15. A method according to claim 10 which further comprises adding an active agent synergist to the active agent/fatty acid mixture.

16. A pest control system comprising a polymeric formulation according to claim 1.

17. A pest control system according to claim 16 which is selected from the group consisting of animal collars, ear tags, pest strips, pest blocks, and film coverings.

5 18. A pest control system which is an animal collar comprising ethylene-vinyl acetate copolymer, from about 5 wt% to about 50 wt% of stearic acid, and from about 40 wt% to about 80 wt% of low-melting polymer or copolymer.

19. A method for releasing an active agent into an environment over an extended period of time, the method comprising placing a pest control system into the environment,  
10 wherein the pest control system comprises a polymeric formulation according to claim 1.

20. A method according to claim 19 wherein the pest control system is an animal collar comprising ethylene-vinyl acetate copolymer and stearic acid.